INTELLECTUAL PROPERTY

VALUATION, EXPLOITATION, AND INFRINGEMENT DAMAGES

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Published by John Wiley & Sons, Inc., Hoboken, New Jersey.
Published simultaneously in Canada.

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Library of Congress Cataloging-in-Publication Data:

ISBN-13 978-0-471-68323-X

ISBN-10 0-471-68323-X

Printed in the United States of America

10 9 8 7 6 5 4 3 2 1

CHAPTER 7

VALUATION PRINCIPLES AND TECHNIQUES

Some basic valuation principles must be understood before any attempt is made to address the very specialized challenges of valuing intangible assets and intellectual property. Because these assets are nearly always part of the aggregation of assets that constitute a business enterprise, this chapter addresses the appraisal principles that underlie a business enterprise valuation.

7.1 VALUATION PRINCIPLES

Everyone who must address valuation issues draws on a body of knowledge that has been developed over time, originally in connection with the appraisal of real property. These principles also have been used, in whole or in part, to appraise machinery, gemstones, and works of art, and, as presented here, they are equally appropriate for intangible assets and intellectual property. There has been considerable development and refinement of the means to analyze and utilize the information ingredients, but the basic principles have remained unchanged.

An appraisal is an opinion about the attributes of something. An appraisal can address the attractiveness, style, quality, size, weight, or color of an object. Herein the terms "appraisal" and "valuation" are used interchangeably to mean an opinion of the monetary value of property. An alternative way of defining a valuation is that it describes an assumed (or "virtual") transaction. That is, it is an estimate of the consideration (the agreed-upon price) in a transaction that has not taken place. Therefore, a valuation must describe the property rights presumed to be the focus of the transaction and the terms assumed, in order to make clear the meaning of the consideration estimated. Stated another way, we must completely describe the virtual transaction in order to understand its result.

Because the terms "value" and "property" are used so commonly, it is important to examine their various meanings and to specify their use in this context. This discussion forms a foundation for more detailed analyses in subsequent chapters. In building this foundation, we include some valuation concepts that are not directly applicable to intangible assets and intellectual property. This is necessary in order to eliminate the considerable confusion in valuation terminology and to sort out those valuation concepts that are applicable to a particular property.

(a) PREMISE OF VALUE. Henry Babcock describes value as being "expressible in terms of a single lump sum of money considered as payable or expended at a particular point in time in exchange for property, that is, the right to receive future benefits beginning at that particular timepoint."[1]

Oliver Wendell Holmes recognized that value has many meanings when he said: "A word (value) is not a crystal, transparent and unchanged; it is the skin of a living thought, and may vary greatly in color and content according to the circumstances and the time in which it is used."[2]

Value is not the same as price or cost, although at times they are equivalent. When we speak of "getting a bargain" or "paying dearly" for something, we are verbalizing a perceived difference between price and value, as Oscar Wilde did when he described a cynic as "a man who knows the price of everything and the value of nothing."[3]

Value is the representation of all future benefits of ownership, compressed into a single payment. If property rights are exchanged in an arm's-length transaction between knowledgeable parties, the agreed-upon price is both the market value at that moment and, to the buyer, the "cost." Both buyer and seller have considered the future economic benefits of owning the property rights and have come to an agreement about their present value. As time passes, however, the price (of that transaction) never changes, and the cost to the buyer therefore remains the same. The market value of the rights, however, is subject to continual change as the future benefits increase or decrease with the passage of time. As a result, an opinion of value can be expressed only relative to a given moment or "as of" a specific date.

In addition, the future benefits of ownership cannot be quantified without defining whose ownership is assumed and/or the underlying purpose of the valuation. The distinction of ownership and purpose is essential to the appraisal process. A valuation cannot proceed without a definitive premise of value. One cannot, for example, develop a meaningful answer to the question "What is my car worth?" because additional information is necessary. Value does not exist in the abstract and must be addressed within the context of time, place, potential owners, and potential uses. If my car's value "is in the eye of the beholder," we need to know who the beholder will be. Is it:

An insurance company?

A used car dealer?

A neighbor?

A tax assessor?

An accountant?

The executor of my estate?

A dealer in scrap metal?

Sometimes identifying the recipient of the appraisal will define the value premise, since by custom or law the requirement of certain users has been defined. In other cases, it is necessary to determine how the valuation will be used. Some examples include using the valuation to:

Estimate the cost of replacing property

Determine how much insurance to carry

1. Henry A. Babcock, FASA, *Appraisal Principles and Procedures* (Washington, DC: American Society of Appraisers), Chapter 6, p. 95.
2. Ibid., *The Appraisal of Real Estate* (1978), p. 21.
3. Oscar Wilde, *Lady Windemere's Fan*, Act III.

Assist in setting a selling price

Set the amount of a charitable donation

Calculate the amount of estate, gift, or income taxes

Determine the amount of a damage claim

Estimate the value of property as collateral in a loan transaction

Estimate the price a property would bring at auction

Each of these combinations of appraisal use and purpose has a specific premise of value that is appropriate.

These same questions and answers can be applied to intellectual property. As an example, if I am a university owner of intellectual property, I would be interested in discovering the best means to exploit it. I would first have to form an opinion of its most promising use and consider that together with alternate means of realization. For example, could I:

- Continue its development and attempt to market it myself?
- Form a joint venture with someone already in the business?
- License it to others?

Other questions include: What is its highest and best use? How do I measure it? Naturally, the highest and best use is that which provides the highest net return. That may vary considerably, depending on how the intellectual property is exploited, when it is exploited, and with whom it is exploited.

A careful definition of value is most important in appraisals of certain types of property. The more that a property is designed, constructed, or suited for a special purpose, the more difference there will be in value measured by different premises. This is especially true of intangible assets and intellectual property, which usually have a very special purpose and which often have their highest value only within the business enterprise of which they are a part.

At the other extreme, if one were called upon to appraise a new $20 bill, the premise of value would be immaterial to the result. It would not matter for whom the appraisal was made, for what purpose, or at what time (assuming the conclusion were to be stated in terms of dollars, and not buying power). This property's complete liquidity negates the value differences that would result from assuming different value premises. Exhibit 14.1 shows a graphic representation of value premise difference as applied to various types of business assets.

In following sections we introduce several definitions of value as well as several types of cost, and indicate for each its most common usage in the valuation process. Examples of valuation concepts applied to physical property are also presented in order to better illustrate the underlying theories.

(b) PROPERTY DEFINITION. One might imagine that the task of defining a property to be appraised would not loom large, compared to the other requirements of the process. Most readers may think of property definition as being the same as a physical description. To be sure, that is part of it. In order to express an opinion about the value of a plot of land, one must determine its boundaries and area. We must also know something about its physical character—whether it is flat, hilly, dry or wet, and so forth. To appraise

a machine, we must have a description of what it does; how old it is; its make, model, and serial number; its condition; and the like. This sort of information is just the first level of information that we need, but it is not trivial.

The asset we are really appraising is the right to use the property, not its physical embodiment. We therefore must define not only the physical nature of the property but also the rights that will be the basis of the future economic benefits. There is obviously a great difference in value between the full right of ownership to a machine and the right to use the machine for three years in the manufacture of a specific product.

We will be discussing these factors in greater detail when we present the subject of intellectual property exploitation. At this point we simply wish to caution the reader that a premise of value and a description of the property are two very essential ingredients in a valuation.

Just as an expert skier recognizes many different types of snow conditions, and just as an expert sailor can detect a myriad of wind and water conditions (because their skills permit them to make seemingly minute adjustments for factors that go unnoticed to the uninitiated), an expert appraiser must recognize the nuances of property and its ownership.

(c) MARKET VALUE. This measure of value is the most commonly used and is also, unfortunately, the most misunderstood. The terms "fair market value," "fair value," "true value," and "exchange value" are also found in appraisal literature, the law, and court cases.

In fairness, the appraisal profession must take some of the blame for this confusion, for not having been quicker to reach internal agreement and for not working more effectively to educate the public. Putting that aside for the moment, we will proceed with yet another attempt to clarify this concept.

(i) Market Value—Conditions of Exchange. There are two recognized definitions of market value. First, market value embodies the concept of an exchange of property. Further, it defines the conditions of that exchange. There are, therefore, different types of market value, as those conditions change. All, however, proceed from five basic concepts:

1. Market value is the amount at which a property would exchange . . .

   Two persons are coming together for the purpose of exchanging property for money (since an appraisal is made in terms of money).

2. . . . between a willing buyer and a willing seller . . .

   These two persons want to make the exchange.

3. . . . neither being under compulsion . . .

   Neither of the parties is being forced, by the other or by circumstances, to make the transaction.

4. . . . each having full knowledge of all relevant facts . . .

   Both parties are aware of what is included in the sale, the condition of the property, its history and possible use, and liabilities against it.

5. . . . and with equity to both.

   The exchange will be fair to both parties, and neither will gain advantage in negotiation or in the terms of the sale.